IN THE CLAIMS:

1.   (Currently amended) A method of translating a virtual address to a physical address in a real time operating system, the method comprising:

indexing into a first level table using a portion of the virtual address <u>and a base address register or location</u>;

generating an offset to a second level table based on an entry in the first level table combined with a portion of the virtual address; and

combining the virtual address with an entry in the second level table obtained using the offset<u>;</u>

<u>wherein multiple user programs in partitions co-exist, with each partition having a unique set of tables which are selected by the operating system upon partition activation by loading the base address register or location for the table corresponding to that partition.</u>

2.   (Original) The method of claim 1 wherein the entry in the second level table comprises multiple control bits for all pages of a decode area and valid bits for each page in the decode area.

3.   (Original) The method of claim 1 wherein a single half-word in the second level table corresponds to two hardware register words.

4.   (Original) The method of claim 3 wherein the single half-word is formed to minimize operations of a computer implementing the method.

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